AU 1644

BATCH

RAW SEQUENCE LISTING DATE: 10/11/2000 PATENT APPLICATION: US/09/522,752 TIME: 10:58:23

Input Set : A:\1855.1064003.TXT

Output Set: N:\CRF3\10112000\I522752.raw

```
4 <110> APPLICANT: Andrew, David P.
                 Zabel, Brian A.
                 Ponath, Paul D.
       8 <120> TITLE OF INVENTION: ANTI-GPR-9-6 ANTIBODIES AND METHODS OF
                 IDENTIFYING MODULATORS OF GPR-9-6 FUNCTION
      12 <130> FILE REFERENCE: 1855.1064-003
      14 <140> CURRENT APPLICATION NUMBER: US 09/522,752
C--> 15 <141> CURRENT FILING DATE: 2000-05-10
     17 <150> PRIOR APPLICATION NUMBER: US 09/266,464
18 <151> PRIOR FILING DATE: 1999-03-11
      20 <160> NUMBER OF SEQ ID NOS: 15
      22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
      24 <210> SEQ ID NO: 1
      25 <211> LENGTH: 2577
      26 <212> TYPE: DNA
      27 <213> ORGANISM: Homo sapiens
      29 <220> FEATURE:
      30 <221> NAME/KEY: CDS
      31 <222> LOCATION: (58)...(1131)
      33 <400> SEOUENCE: 1 ·
      34 aatattttcc ttgacctaat gccatcttgt gtccccttgc agagccctat tcctaac atg
      35
                                                                                      Met
      36
      38 gct gat gac tat ggc tct gaa tcc aca tct tcc atg gaa gac tac gtt
                                                                                             108
      39 Ala Asp Asp Tyr Gly Ser Glu Ser Thr Ser Ser Met Glu Asp Tyr Val
                        5
                                                 10
      42 aac ttc aac ttc act gac ttc tac tgt gag aaa aac aat gtc agg cag 43 Asn Phe Asn Phe Thr Asp Phe Tyr Cys Glu Lys Asn Asn Val Arg Gln 44 20 25 30
                                                                                             156
      46 ttt gcg age cat ttc ctc cca ccc ttg tac tgg ctc gtg ttc atc gtg
     47 Phe Ala Ser His Phe Leu Pro Pro Leu Tyr Trp Leu Val Phe Ile Val
48 35 40 45
      50 ggt gcc ttg ggc aac agt ctt gtt atc ctt gtc tac tgg tac tgc aca 51 Gly Ala Leu Gly Asn Ser Leu Val Ile Leu Val Tyr Trp Tyr Cys Thr
                                                                                             252
                                                           60
                                  55
                                                                                             300
      54 aga gtg aag acc atg acc gac atg ttc ctt ttg aat ttg gca att gct
      55 Arg Val Lys Thr Met Thr Asp Met Phe Leu Leu Asn Leu Ala Ile Ala 56 70 75 80
                           70
                                                   75
      58 gac etc etc ttt ett gte act ett ecc tte tgg gee att get get
                                                                                             348
      59 Asp Leu Leu Phe Leu Val Thr Leu Pro Phe Trp Ala Ile Ala Ala Ala
                     85
                                                90
                                                                        95
     62 gac cag tgg aag ttc cag acc ttc atg tgc aag gtg gtc aac agc atg
63 Asp Gln Trp Lys Phe Gln Thr Phe Met Cys Lys Val Val Asn Ser Met
                                          105
                                                                   110
                  100
     66 tac aag atg aac ttc tac agc tgt gtg ttg ctg atc atg tgc atc agc 67 Tyr Lys Met Asn Phe Tyr Ser Cys Val Leu Leu Ile Met Cys Ile Ser
                                                                                             444
```

120



ENTERED

115

RAW SEQUENCE LISTING DATE: 10/11/2000 PATENT APPLICATION: US/09/522,752 TIME: 10:58:23

Input Set : A:\1855.1064003.TXT
Output Set: N:\CRF3\10112000\I522752.raw

	۲.																
70	gtg	gac	agg	tac	att	gcc	att	gcc	cag	gcc	atg	aga	gca	cat	act	tgg	492
				Tyr													
72	130	-	-	-		135					140					145	
				agg													540
75	Arg	Glu	Lys	Arg	Leu	Leu	Tyr	Ser	Lys	Met	Val	Cys	Phe	Thr	Ile	Trp	
76					150					155					160		
78	gta	ttg	gca	gct	gct	ctc	tgc	atc	cca	gaa	atc	tta	tac	agc	caa	atc	588
79	Val	Leu	Ala	Ala	Ala	Leu	Cys	Ile	Pro	Glu	Ile	Leu	Tyr	Ser	Gln	Ile	
80				165					170					175			
				tcc													636
83	Lys	Glu	Glu	Ser	Gly	Ile	Ala	Ile	Cys	Thr	Met	Val	Tyr	Pro	Ser	Asp	
84			180					185					190				
86	gag	agc	acc	aaa	ctg	aag	tca	gct	gtc	ttg	acc	ctg	aag	gtc	att	ctg	684
87	Glu	Ser	Thr	Lys	Leu	Lys	Ser	Ala	Val	Leu	Thr	Leu	Lys	Val	Ile	Leu	
88		195					200					205					
				ctt													732
91	Gly	Phe	Phe	Leu	Pro	Phe	Val	Val	Met	Ala	Cys	Cys	Tyr	Thr	Ile		
	210					215					220					225	
				ctg													780
95	Ile	His	Thr	Leu	Ile	Gln	Ala	Lys	Lys	Ser	Ser	Lys	His	Lys	Ala	Leu	
96					230					235					240		
				atc													828
	-	Val	Thr	Ile		Val	Leu	Thr			Val	Leu	Ser			Pro	
100				245					250					255			
																ttc	876
	-	Ası	-		. Lei	ı Leu	Val			· Ile	e Asr	Ala			Met	: Phe	
104			260					265					270				
																gtc	924
				з Сув	Ala	ı Val			Asn	Ile	Asp			Phe	Glr	ı Val	
108		275					280					285					0.70
110	acc	cag	g acc	ato	gco	tto	ttc	cac	agt	tgo	cto	aac	CCT	gtt	Ctc	: tat	972
			Thi	rIle	A La			HIS	Ser	Cys			Pro) vai	rer	Tyr	
	290					295					300					305	1000
																aag	1020
		. Phe	val	r GTĀ		-	Pne	e Arg	Arg			ıvaı	. цуз	THI	320	Lys	
116					310					315							1068
																aga	1000
		i ren	ı Gıy			s ser	GII	на			vaı	. ser	Pile	335		Arg	
120				325					330		+.	. ~~~				gga	1116
																	1110
$\frac{123}{124}$		СТУ	340		ьγ	. Leu	Ser	345		ьеи	пес	GIU	350		ser	Gly	
					+~-	. ~~~	a+ a+			~~+~	, a a +	aatt			2242	aatg	1171
				Leu		999	gici		ctya	9909	ica t	.99.00		99	uugu	aucy	44/4
128		355		. дец													
				na = =	cant	tt ^	CCC3	ctas	t aa	gacc	agag	ב מה ז	ata∍	aac	agaa	aagaaa	a 1231
																aagcaa	
																gatge	
																cactc	
	cyc			auug	2495	,	-439		, cu		. , , , , ,	,		,,,,,	50		,

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/522,752
DATE: 10/11/2000
TIME: 10:58:23

Input Set : A:\1855.1064003.TXT

Output Set: N:\CRF3\10112000\I522752.raw

```
134 coggagoato aatgoogotg cototggagg agooottgga ttttotocat goactgtgaa
                                                                              1471
135 cttctgtggc ttcagttctc atgctgcctc ttccaaaagg ggacacagaa gcactggctg
                                                                               1531
136 ctgctacaga ccgcaaaagc agaaagtttc gtgaaaatgt ccatctttgg gaaattttct
                                                                               1591
137 accetgetet tgageetgat aacceatgee aggtettata gatteetgat etagaacett
138 tocaggoaat ctcagaccta attteettet gtteteettg ttetgttetg ggccagtgaa
                                                                               1771
139 ggtccttgtt ctgattttga aacgatctgc aggtcttgcc agtgaacccc tggacaactg
140 accacacca caaggcatcc aaagtctgtt ggcttccaat ccatttctgt gtcctgctgg
                                                                               1831
141 aggttttaac ctagacaagg attccgctta ttccttggta tggtgacagt gtctctccat
                                                                               1891
                                                                               1951
142 ggcctgagca gggagattat aacagctggg ttcgcaggag ccagccttgg ccctgttgta
143 ggcttgttct gttgagtggc acttgctttg ggtccaccgt ctgtctgctc cctagaaaat
                                                                               2011
144 gggctggttc ttttggccct cttctttctg aggcccactt tattctgagg aatacagtga
                                                                               2071
145 gcagatatgg gcagcagcca ggtagggcaa aggggtgaag cgcaggcctt gctggaaggc
                                                                               2131
146 tatttacttc catgcttctc cttttcttac tctatagtgg caacatttta aaagctttta
                                                                               2191
147 acttagagat taggctgaaa aaaataagta atggaattca cctttgcatc ttttgtgtct
                                                                               2251
148 ttcttatcat gatttggcaa aatgcatcac ctttgaaaat atttcacata ttggaaaagt
                                                                               2311
149 gctttttaat gtgtatatga agcattaatt acttgtcact ttctttaccc tgtctcaata
150 ttttaagtgt gtgcaattaa agatcaaata gatacattaa gagtgtgaag gctggtctga
                                                                               2431
151 aggtagtgag ctatctcaat cggattgttc acactcagtt acagattgaa ctccttgttc
                                                                               2491
                                                                               2551
152 tacttccctg cttctctcta ctgcaattga ctagtcttta aaaaaaagtg tgaagagtaa
153 gcaataggga taaggaaata agatct
                                                                               2577
155 <210> SEQ ID NO: 2
156 <211> LENGTH: 357
157 <212> TYPE: PRT
158 <213> ORGANISM: Homo sapiens
160 <400> SEQUENCE: 2
161 Met Ala Asp Asp Tyr Gly Ser Glu Ser Thr Ser Ser Met Glu Asp Tyr
162 1 5
163 Val Asn Phe Asn Phe Thr Asp Phe Tyr Cys Glu Lys Asn Asn Val Arg
164 20 25 30
165 Gln Phe Ala Ser His Phe Leu Pro Pro Leu Tyr Trp Leu Val Phe Ile
166 35 40 45
167 Val Gly Ala Leu Gly Asn Ser Leu Val Ile Leu Val Tyr Trp Tyr Cys
168 50 55 60
169 Thr Arg Val Lys Thr Met Thr Asp Met Phe Leu Leu Asn Leu Ala Ile
170 65 70 75 80
171 Ala Asp Leu Leu Phe Leu Val Thr Leu Pro Phe Trp Ala Ile Ala Ala 172 \phantom{\bigg|}85\phantom{\bigg|}90\phantom{\bigg|}95\phantom{\bigg|}
173 Ala Asp Gln Trp Lys Phe Gln Thr Phe Met Cys Lys Val Val Asn Ser
174 100 105 110
175 Met Tyr Lys Met Asn Phe Tyr Ser Cys Val Leu Leu Ile Met Cys Ile
176 115 120 125
177 Ser Val Asp Arg Tyr Ile Ala Ile Ala Gln Ala Met Arg Ala His Thr
178 130 135 140
      130
179 Trp Arg Glu Lys Arg Leu Leu Tyr Ser Lys Met Val Cys Phe Thr Ile
180 145 150 155 160
181 Trp Val Leu Ala Ala Ala Leu Cys Ile Pro Glu Ile Leu Tyr Ser Gln
182 165 170 175
183 Ile Lys Glu Glu Ser Gly Ile Ala Ile Cys Thr Met Val Tyr Pro Ser
```

PATENT APPLICATION: US/09/522,752 TIME: 10:58:23 Input Set : A:\1855.1064003.TXT Output Set: N:\CRF3\10112000\I522752.raw 185 Asp Glu Ser Thr Lys Leu Lys Ser Ala Val Leu Thr Leu Lys Val Ile 195 200 187 Leu Gly Phe Phe Leu Pro Phe Val Val Met Ala Cys Cys Tyr Thr Ile 210 215 220 188 189 Ile Ile His Thr Leu Ile Gln Ala Lys Lys Ser Ser Lys His Lys Ala 230 235 190, 225 191 Leu Lys Val Thr Ile Thr Val Leu Thr Val Phe Val Leu Ser Gln Phe 245 .250 255 192 193 Pro Tyr Asn Cys Ile Leu Leu Val Gln Thr Ile Asp Ala Tyr Ala Met 270 194 260 265 195 Phe Ile Ser Asn Cys Ala Val Ser Thr Asn Ile Asp Ile Cys Phe Gln 275 280 285 197 Val Thr Gln Thr Ile Ala Phe Phe His Ser Cys Leu Asn Pro Val Leu 290 295 300 199 Tyr Val Phe Val Gly Glu Arg Phe Arg Arg Asp Leu Val Lys Thr Leu 315 200 305 310 201 Lys Asn Leu Gly Cys Ile Ser Gln Ala Gln Trp Val Ser Phe Thr Arg 202 325 330 335 203 Arg Glu Gly Ser Leu Lys Leu Ser Ser Met Leu Leu Glu Thr Thr Ser 204 340 345 205 Gly Ala Leu Ser Leu 206 355 208 <210> SEQ ID NO: 3 209 <211> LENGTH: 26 210 <212> TYPE: PRT 211 <213> ORGANISM: Artificial Sequence 213 <220> FEATURE: 214 <223> OTHER INFORMATION: NH2-Terminal Peptide of Human GPR-9-6 217 <400> SEQUENCE: 3 218 Met Ala Asp Asp Tyr Gly Ser Glu Ser Thr Ser Ser Met Glu Asp Tyr 219 1 10 15 220 Val Asn Phe Asn Phe Thr Asp Phe Tyr Cys 221 20 25 223 <210> SEQ ID NO: 4 224 <211> LENGTH: 35 225 <212> TYPE: DNA 226 <213> ORGANISM: Artificial Sequence 228 <220> FEATURE: 229 <223> OTHER INFORMATION: Oligonucleotide primer 233 <400> SEQUENCE: 4 234 togaagggat coctaacatg gotgatgact atggc 236 <210> SEO ID NO: 5

RAW SEQUENCE LISTING

DATE: 10/11/2000

35

35

237 <211> LENGTH: 35 238 <212> TYPE: DNA

241 <220> FEATURE:

246 <400> SEQUENCE: 5

239 <213> ORGANISM: Artificial Sequence

247 aagaagtota gaacccctca gagggagagt gctcc

242 <223> OTHER INFORMATION: Oligonucleotide primer

Input Set : A:\1855.1064003.TXT Output Set: N:\CRF3\10112000\1522752.raw 249 <210> SEQ ID NO: 6 250 <211> LENGTH: 30 251 <212> TYPE: DNA 252 <213> ORGANISM: Artificial Sequence 254 <220> FEATURE: 255 <223> OTHER INFORMATION: Oligonucleotide primer 259 <400> SEQUENCE: 6 30 260 tcgaagaagc ttatgaacct gtggctcctg 262 <210> SEQ ID NO: 7 263 <211> LENGTH: 30 264 <212> TYPE: DNA 265 <213> ORGANISM: Artificial Sequence 267 <220> FEATURE: 268 <223> OTHER INFORMATION: Oligonucleotide primer 272 <400> SEQUENCE: 7 30 273 aagaagtcta gatcacagtc ctgaattagc 275 <210> SEQ ID NO: 8 276 <211> LENGTH: 879 277 <212> TYPE: DNA 278 <213> ORGANISM: Homo sapiens 280 <400> SEQUENCE: 8 281 atgaacctgt ggctcctggc ctgcctggtg gccggcttcc tgggagcctg ggcccccgct 282 gtccacaccc aaggtgtctt tgaggactgc tgcctggcct accactaccc cattgggtgg 120 180 283 gctgtgctcc ggcgcgcctg gacttaccgg atccaggagg tgagcgggag ctgcaatctg 284 cctgctgcga tattctacct ccccaagaga cacaggaagg tgtgtgggaa ccccaaaagc 285 agggaggtgc agagagccat gaagctcctg gatgctcgaa ataaggtttt tgcaaagctc 300 286 caccacaaca ygcagacett ccaagcagge ceteatgetg taaagaagtt gagttetgga 287 aactccaagt tatcatcatc caagtttagc aatcccatca gcagcagcaa gaggaatgtc 288 tccctcctga tatcagctaa ttcaggactg tgagccggct catttctggg ctccatcggc 540 289 acaggaggg ccggatcttt ctccgataaa accgtcgccc tacagaccca gctgtcccca 600 290 egectetgte ttttgggtea agtettaate eetgeacetg agttggteet eeetetgeac 660 291 ccccaccacc tectgeccgt etggcaactg gaaagaagga gttggeetga ttttaacett 720 292 ttgccgctcc ggggaacagc acaatcctgg gcagccagtg gctcttgtag agaaaactta 780 293 ggatacetet eteaetttet gtttettgee gteeaeceeg ggeeatgeea gtgtgteete 294 tgggtcccct ccaaaaatct ggtcattcaa ggatcccctc ccaaggctat gcttttctat 840 879 295 aacttttaaa taaaccttgg ggggtgaatg gaataaaaa 297 <210> SEQ ID NO: 9 298 <211> LENGTH: 150 299 <212> TYPE: PRT 300 <213> ORGANISM: Homo Sapiens 302 <220> FEATURE: 303 <221> NAME/KEY: VARIANT 304 <222> LOCATION: (104)...(104) 305 <223> OTHER INFORMATION: Xaa= Met or Thr 307 <400> SEOUENCE: 9 308 Met Asn Leu Trp Leu Leu Ala Cys Leu Val Ala Gly Phe Leu Gly Ala 10 15 310 Trp Ala Pro Ala Val His Thr Gln Gly Val Phe Glu Asp Cys Cys Leu

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/522,752

DATE: 10/11/2000

TIME: 10:58:23



Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY PATENT APPLICATION: US/09/522,752 DATE: 10/11/2000 TIME: 10:58:24

Input Set : A:\1855.1064003.TXT
Output Set: N:\CRF3\10112000\I522752.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 L:374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11